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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/611,657	06/30/2003	Ross G. Cutler	MS1-1504US	1984

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EXAMINER

WANG, CLAIRE X

ART UNIT	PAPER NUMBER
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2631

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/611,657

Applicant(s)

CUTLER, ROSS G.

Examiner

Claire Wang

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06/30/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/28/2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by David et al. (US 6,816,603 B2).

As to claim 1, David et al. (from this point forward shall be referred to as David) teaches a method for determining height (top y/x, Fig. 10) parameters that describe a dynamically varying height (Fig. 10 labels the upper boundary of the patient to be Top Y/X; this is interpreted to be height. When the subject is walking the point Top Y/X changes by small degrees, thus making it varying) of an ambulatory subject (walking patient, Col. 6 lines 29-32) based on video analysis (Col. 1 lines 41-43) of the subject, comprising: acquiring a sequence of images (sequence of silhouettes, Col. 13 lines 34-41) that collectively captures the gait (motion portraits, Col. 13 lines 34-48) of the subject. David also teaches measuring a dynamically varying height function (sinusoidal curve; Fig. 11) of the subject based on an analysis of the varying height of the subject in the sequence of images (information of the gait and balance is used to generate the sinusoidal curve; Col. 18 lines 39-57); and fitting the dynamically varying height function of the subject to a model ("finger print", Fig. 9a) that describes varying height, wherein the height parameters correspond to parameters used in the model.

As to claim 5, it differs from claim 1 only in that claim 1 is a method claim whereas claim 5 is the apparatus of claim 1. Thus claim 5 is analyzed previously discussed as respect to claim 1.

As to claim 2, David teaches the model ("finger print", Fig. 9a) represents an ideal variance in height (normal way of walking, Col. 13 lines 64-66) as a sinusoidal function (Fig.11).

As to claim 3, David teaches the parameters used in the model include a first parameter that describes a baseline height value (it is mentioned that an example of a measured parameter is the maximum height that a patient's foot is raised from the ground. It is then also possible to measure the overall patient's height; Col. 6 lines 17-20) exhibited by a person in ambulatory motion, and a second value that describes a maximum deviation (the normal walk pattern or "finger print" of a patient is given in a range, once a value is out of the range of acceptable values then the system will be notified; Col. 6 lines 22-28) from the baseline height value.

As to claim 4, David teaches the measuring of the dynamically varying height function includes: extracting a series of depictions of the ambulatory subject from a larger body of image information (the subject is distinguished from the background using background subtraction; Fig. 4) contained within the sequence of images (silhouette sequence, Col. 13 lines 34-41) defining a series of bounding boxes that enclose respective depictions (edge detection, Fig. 4). David further teaches that for each of the depictions, determining a distance between a point midway between the feet of the subject (the vertical line going through the patient divides the patient in half;

Fig. 10) and a top of the depiction's associated bounding box (the vertical line is going through the middle of the patient; Fig. 10).

As to claim 6, it differs from claim 2 only in that claim 2 is a method claim whereas claim 6 is the apparatus of claim 2. Thus claim 6 is analyzed previously discussed as respect to claim 2.

As to claim 7, it differs from claim 3 only in that claim 3 is a method claim whereas claim 7 is the apparatus of claim 3. Thus claim 7 is analyzed previously discussed as respect to claim 3.

As to claim 8, it differs from claim 4 only in that claim 4 is a method claim whereas claim 8 is the apparatus of claim 4. Thus claim 8 is analyzed previously discussed as respect to claim 4.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Blake et al. (US 2003/0161500 A1) teaches a system for probabilistic based for pattern tracking.

Krebs et al. (US 2002/0028003 A1) teaches a way to identify individuals using anatomy and gait parameters.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Claire Wang whose telephone number is 571-270-1051. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chanh Nguyen can be reached on 571-272-7222. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Claire Wang  
08/16/2006

  
**CHANH D. NGUYEN**  
**SUPERVISORY PATENT EXAMINER**